



(09/2003)

<p><b>1.0 Degree Title</b> Specify the two degrees for concurrent degree programs</p> <div style="border: 1px solid black; padding: 2px; text-align: center;">B.Sc.</div> <p><b>1.1 Major (Legacy= Subject) (30-char. max.)</b></p> <div style="border: 1px solid black; padding: 2px;">Joint Major in Physiology and Mathematics</div> <p><b>1.2 Concentration (Legacy = Concentration/Option) If applicable (30 char. max.)</b></p> <div style="border: 1px solid black; height: 20px;"></div> <p><b>1.3 Minor (with Concentration, if applicable) (30 char. max.)</b></p> <div style="border: 1px solid black; height: 20px;"></div> <p><b>1.4 Category</b></p> <table style="width: 100%; border: none;"> <tr> <td><input type="checkbox"/> Faculty Program (FP)</td> <td><input type="checkbox"/> Honours (HON)</td> </tr> <tr> <td><input type="checkbox"/> Major</td> <td><input type="checkbox"/> Joint Honours Component (HC)</td> </tr> <tr> <td><input checked="" type="checkbox"/> Joint Major</td> <td><input type="checkbox"/> Internship/Co-op</td> </tr> <tr> <td><input type="checkbox"/> Major Concentration (CON)</td> <td><input type="checkbox"/> Thesis (T)</td> </tr> <tr> <td><input type="checkbox"/> Minor</td> <td><input type="checkbox"/> Non-Thesis (N)</td> </tr> <tr> <td><input type="checkbox"/> Minor Concentration (CON)</td> <td><input type="checkbox"/> Other</td> </tr> </table> <p style="margin-left: 20px;">Please specify</p> <div style="border: 1px solid black; width: 150px; height: 20px; margin-left: 20px;"></div> <p><b>1.5 Complete Program Title</b></p> <div style="border: 1px solid black; padding: 2px;">Joint Major in Physiology and Mathematics</div>	<input type="checkbox"/> Faculty Program (FP)	<input type="checkbox"/> Honours (HON)	<input type="checkbox"/> Major	<input type="checkbox"/> Joint Honours Component (HC)	<input checked="" type="checkbox"/> Joint Major	<input type="checkbox"/> Internship/Co-op	<input type="checkbox"/> Major Concentration (CON)	<input type="checkbox"/> Thesis (T)	<input type="checkbox"/> Minor	<input type="checkbox"/> Non-Thesis (N)	<input type="checkbox"/> Minor Concentration (CON)	<input type="checkbox"/> Other	<p><b>2.0 Administering Faculty/Unit</b></p> <div style="border: 1px solid black; padding: 2px; text-align: center;">Science</div> <p><b>Offering Faculty/Department</b></p> <div style="border: 1px solid black; padding: 2px; text-align: center;">Medicine/Physiology</div> <p><b>3.0 Effective Term of revision or retirement</b> Please give reasons in 8.0 "Rationale" in the case of retirement (Ex. Sept. 2004 = 200409)</p> <p><b>Term</b></p> <div style="border: 1px solid black; padding: 2px; text-align: center;">Sept. 2005</div> <p><b>4.0 Existing Credit Weight</b>      <b>Proposed Credit Weight</b></p> <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 2px; text-align: center;">77 credits</div> <div style="border: 1px solid black; padding: 2px; text-align: center;">77 credits</div> </div> <p><b>5.0 Description (Maximum 150 words)</b></p> <div style="border: 1px solid black; padding: 5px; min-height: 100px;">         Splitting of spanned courses PHGY 212D1 and D2 into PHGY 212 Fall and PHGY 231 Winter.       </div>
<input type="checkbox"/> Faculty Program (FP)	<input type="checkbox"/> Honours (HON)												
<input type="checkbox"/> Major	<input type="checkbox"/> Joint Honours Component (HC)												
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<b>6.0 List of existing program and proposed program</b>	
<p><b>Existing program</b> (list courses as follows: Subj Code/Crse Num, Title, Credit weight, under the headings of: Required Courses, Complementary Courses, Elective Courses)</p> <div style="border: 1px solid black; padding: 10px; min-height: 200px;"> <p style="text-align: center;">See below</p> </div>	<p><b>Proposed program</b> (list courses as follows: Subj Code/Crse Num, Title, Credit weight, under the headings of: Required Courses, Complementary Courses, Elective Courses)</p> <div style="border: 1px solid black; padding: 10px; min-height: 200px;"> <p style="text-align: center;">See below</p> </div>

**6.0 (Continued) List of existing program and proposed program**

**Existing program** (list courses as follows: Subj Code/Crse Num, Title, Credit weight, under the headings of: Required Courses, Complementary Courses, Elective Courses)

**Joint Major in Physiology and Mathematics  
(77 credits)**

U1 Required Courses (14credits)

**PHGY 212D1** (1) **Introductory Physiology Lab**  
**PHGY 212D2** (1) **Introductory Physiology Lab**  
MATH 222 (3) Calculus III  
MATH 247 (3) Linear Algebra  
or MATH223 (3) Linear Algebra  
BIOL 200 (3) Molecular Biology  
BIOL 309 (3) Mathematical Models in Biology

U1 Complementary Courses (15 credits)

9 credits selected from:

BIOL 201 (3) Cell Biology and Metabolism  
or BIOC 212 (3) Molecular Mechs. of Cell Function  
PHGY209 (3) Mammalin Physiology I  
and PHGY 210 (3) Mammalin Physiology II  
or PHGY 201 (3) Human Physiology: Control  
Systems  
and PHGY 202 (3) Human Physiology: Body  
Functions

6 credits selected from:

MATH 248 (3) Advanced Calculus I  
or MATH 314 (3) Advanced Calculus  
MATH 325 (3) Ordinary Differential Equations  
or MATH 315 (3) Ordinary Differential Equations

U2 Required Courses (24 credits)

MATH 242 (3) Analysis I  
MATH 243 (3) Real Analysis  
MATH 323 (3) Probability Theory  
MATH 326 (3) Nonlinear Dynamics and Chaos  
PHGY 311 (3) Intermediate Physiology I  
PHGY 312 (3) Intermediate Physiology II  
PHGY 313 (3) Intermediate Physiology III  
PHGY 314 (3) Integrative Neuroscience

U2 or U3 Required Courses (6 credits)

MATH 437 (3) Mathematical Methods in Biology  
PHYS 413 (3) The Physical Basis of Physiology

U3 Required Courses (18 credits)

BMDE 519 (3) Analysis of Biomedical Systems &  
Signals  
MATH 319 (3) Partial Differential Equations  
MATH 324 (3) Statistics  
PHGY 461D1 (4.5) Experimental Physiology  
PHGY 461D2 (4.5) Experimental Physiology

**Proposed program** (list courses as follows: Subj Code/Crse Num, Title, Credit weight, under the headings of: Required Courses, Complementary Courses, Elective Courses)

**Joint Major in Physiology and Mathematics  
(77 credits)**

U1 Required Courses (14credits)

**PHGY 212** (1) **Introductory Physiology Lab I**  
**PHGY 213** (1) **Introductory Physiology Lab II**  
MATH 222 (3) Calculus III  
MATH 247 (3) Linear Algebra  
or MATH223 (3) Linear Algebra  
BIOL 200 (3) Molecular Biology  
BIOL 309 (3) Mathematical Models in Biology

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9 credits selected from:

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Function  
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PHGY 461D1 (4.5) Experimental Physiology  
PHGY 461D2 (4.5) Experimental Physiology

7.0 Consultation with  
Related Units

Yes  No

Financial Consult  Yes  No

Attach list of consultations.

8.0 Rationale

The splitting of spanned term course PHGY 212D1 and D2 into PHGY 212 Fall and PHGY 213 Winter.

9.0 Approvals

Routing Sequence	Name	Signature	Date
Department	Dr. E. Cooper		
Curric/Acad Committee			
Faculty 1			
Faculty 2			
Faculty 3			
SCTP			
GS			
APPC			
Senate			

Submitted by

Name   
Phone   
Email   
Submission Date

To be completed by ARR:

CIP Code